



INNOVATION AWARD

# Administration Building Renovation and Addition Worcester State College

Completion Date: May 2009  
Size: 63,000 Square Feet  
Total Project Completion Costs: \$21,536,000

**DESIGN TEAM**  
Miller Dyer Spears Inc., Architect  
William Spears, AIA, LEED AP, Principal in Charge  
Jacob Higginbottom, RA, Project Manager and Bim Specialist  
*Consultants*  
Souza True and Partners, Structural Engineer  
Samiotes, Civil Engineer  
Brown Richardson and Rowe, Landscape Architect  
Thompson Engineering, Electrical Engineer  
VAV International, Mechanical, Plumbing and Fire Protection  
A.M. Fogarty, Cost Estimating  
Kalin Associates, Specifications

**CONTRACTOR**  
W.T. Rich Company, Inc.  
Walter Rich, Principal  
Jonathan Rich, Project Manager  
John DeBettencourt, Superintendent

**DCAM TEAM**  
David B. Perini, Commissioner  
Michael L. McKimmey, Deputy Commissioner  
*Programming*  
Michael B. Williams, Director  
Jennifer Campbell, Program Manager  
*Design and Construction*  
Michael J. Lambert, Director  
Robert Barry, Deputy Director  
Stephen O'Connor, Project Manager  
Michael Kendrick, Project Engineer  
Wesley Generoux, Resident Engineer

**WORCESTER STATE COLLEGE TEAM**  
Janelle Ashley, President  
Sandra Olson, Director of Facilities  
Kathleen Eichelroth, VP Fiscal Affairs  
Peter Fenuccio, Asst. Dir. of Facilities

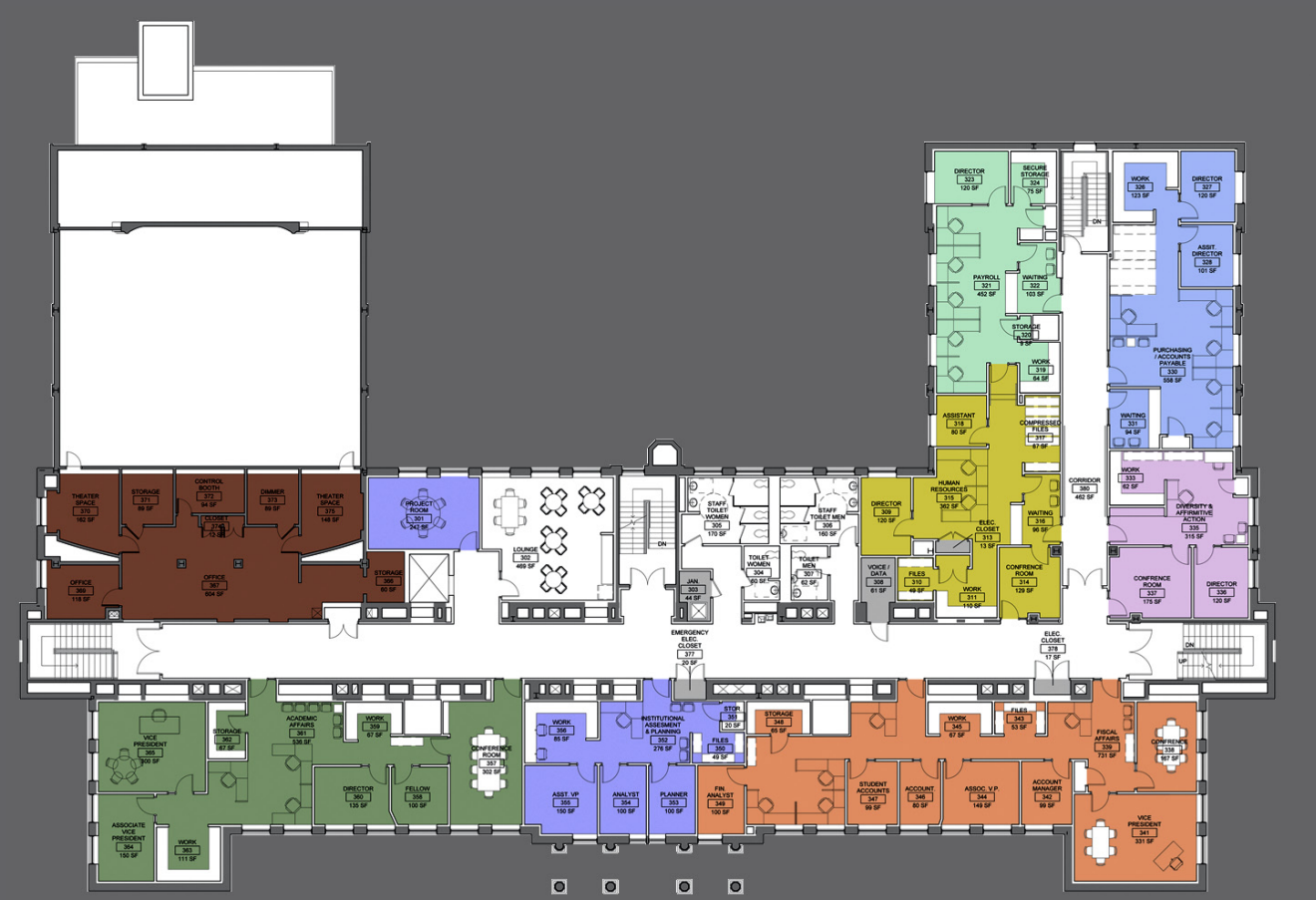
MDS completed design for the full gut renovation of the 63,000 SF circa 1931 administration and student services building at Worcester State College. This 3-story building is being modernized and reconfigured to centralize administrative and student services. The project incorporates sustainable design practices, and was designed to meet LEED Plus criteria.

**INNOVATION**  
MDS produced the design and construction documents for this project using Building Information Modeling (BIM) software, (Autodesk Revit). A full 3D digital model of the existing building was created and all plans, elevations and sections result from views and cuts through this model. The design team took full advantage of the functionality of this model to prioritize and facilitate everything from design, user signoff, permitting, MAA/ADA review, construction document production and coordination, energy modeling, LEED compliance, and cost estimating. A full 3D digital model of the existing building was created and all plans, elevations and sections result from views and cuts through this model.

**TRANSFORMATION**  
A new building entrance and main lobby was designed to face the center of the campus, converting the "back" of the building into a new accessible front door. The first floor will become the main public floor and accommodate student service functions such as the registrar, bursar and financial aid. A two story atrium will connect this level to the floor above where the theatre entrance, admissions office, president's office and development office are located. The third floor will be home to other core administrative functions. A new addition behind the theatre wing will provide a stair and elevator connecting to the theatre support spaces on the level below.

**COMMUNICATION**  
The design challenge of transforming the back of the building into a new main entrance was facilitated by in-house exploration of multiple concepts using the digital model. Simulated 3-D views from different points on the campus were crucial in successfully conveying the nature of the entrance design to the senior staff at the College. Similarly, other alterations to the existing building were presented using 3-D views derived from the model, greatly facilitating consensus building on design issues. These included: a new two story atrium as part of the new entrance, the addition of catwalks to the existing theatre, and handicapped accessibility improvements of the theatre.

The model was also instrumental in obtaining a favorable interpretation from the Architectural Access Board on the dispersal of accessible seating in the theatre. Several perspective drawings demonstrated that views from accessible seating were as good or better than other seats in the orchestra. The mezzanine strategy was more cost effective than trying to change the slope of the existing auditorium floor.



THIRD FLOOR



SECOND FLOOR



GROUND FLOOR



ATRIUM

